

January 2023



Contents

List of tables	3
List of figures	3
Executive Summary	4
Research design and results	4
Insights for the Code of Conduct	6
Next steps	8
Introduction	9
Objectives of study	10
Overview of research activities, time scales and reporting	10
Structure of the report	10
Section 1: Research Design and Results	12
Research design	12
Summary results	12
Demand Flexibility Service	17
Section 2: Feedback on Code Chapters	22
Sales and marketing	22
Contracts and Terms and Conditions	27
Technical due diligence, data and cyber security	31
Complaints and redress	34
Ethical considerations	38
Section 3: Conclusions	43
Reflections from the HOMEflex Team	43
Reflections from SSEN Future Networks Innovation	44
Appendix 1: Methodology	44
Literature review	45
Summary of participants	47
Focus groups	47
Data analysis	50
Appendix 2: Poll results	51
Round One focus groups	51
Round Two focus groups	52
Appendix 3: Concerns raised by participants in the first focus group, by Code chapters	55

List of tables

Table 1: Consumer feedback (Round One) on flex services: coding reference count for thematic analysis by group	13
Table 2: Round One focus group confidence poll results.....	14
Table 3: Round Two focus group confidence poll results.....	14
Table 4: Consumer feedback (Round Two) on main headings of the Code of Conduct, number of coding references by participant group.....	16
Table 5: Screening questions used to determine energy and digital confidence	45
Table 6: Workshop sampling framework	46
Table 7: Key characteristics of recruited workshop participants	47
Table 8: Round One focus group topic guide	48
Table 9: Round Two focus group topic guide	50
Table 10: Poll – How do you normally switch your heating on/off?	51
Table 11: Poll – Do you have any of the following devices in your home?	51
Table 12: Poll – Would your household be able to shift the time you do any of these activities outside of peak time (4-8pm)?.....	51
Table 13: Poll – Overall, what are your main concerns about taking up the flexibility offers we’ve discussed today?	52
Table 14: Poll - Right now, how confident would you be of taking up one or more of the flexibility offers we’ve discussed? (Assume you would be able to afford any upfront cost).....	52
Table 15: Poll – Would accreditation increase your confidence?	52
Table 16: Poll – Please rate the Code of Conduct headings by priority (total)	52
Table 17: Poll - Please rate the Code of Conduct headings by priority (LILC)	53
Table 18: Poll - Please rate the Code of Conduct headings by priority (LIHC)	53
Table 19: Poll - Please rate the Code of Conduct headings by priority (HILC)	53
Table 20: Poll - Please rate the Code of Conduct headings by priority (HIHC).....	53
Table 21: Poll - Right now, how confident would you be of taking up one or more of the flexibility offers we’ve discussed? (Assume you would be able to afford any upfront cost).....	54
Table 22: Round One focus group concerns on Sales & Marketing	55
Table 23: Round One focus group concerns on Contracts and T&Cs	55
Table 24: Round One focus group concerns on Technical due diligence, data and cyber security	56
Table 25: Round One focus group concerns on Complaints and redress.....	56
Table 26: Round One focus group concerns on Ethical Considerations.....	57

List of figures

Figure 1: Focus group structure	5
Figure 2: Overview of research activities and project timeline	10
Figure 3: Comparative confidence poll results from Round One and Round Two focus groups	15
Figure 4: Code of Conduct by priority in Round Two focus groups	15
Figure 5: slide explaining DFS for Round One focus groups	48
Figure 6: Slide explaining battery with grid services offer for Round One focus groups	49
Figure 7: Slide explaining home energy platform for Round One focus groups	49

Executive Summary

This report presents the findings of qualitative research conducted with domestic energy consumers to inform the development of the HOMEflex 'Code of Conduct for Domestic Flexibility Services'. The research had two main objectives:

- 1) Assess the extent that the draft Code of Conduct addresses consumer concerns about energy flexibility services.
- 2) Elicit suggestions for improving the draft Code of Conduct that can be used by the HOMEflex team as they prepare the final version of the Code.

This report is part of the HOMEflex NIA project and details of the full project can be found on the Smarter Energy Networks portal ([project link here](#))¹.

Background

Demand flexibility is a core enabler of the UK's low carbon transition. Innovative products and services are being brought to market that test how much flexibility domestic energy consumers can and will provide. For example, Winter 2022-23 has seen the launch of a demand turn down service by National Grid ESO with 16 suppliers providing flexibility from domestic customers². However, consumer advocates have flagged that consumer protections may not be keeping up with the pace of market innovation. Analysis on existing policy and legislation shows that these do not fully cover the potential risks posed to consumers by emerging flexibility products and services³. The current lack of standards and assurance mechanisms could limit customer uptake or lead to negative outcomes and publicity, undermining trust and participation in flexibility markets.

The HOMEflex project aims to address this by developing a Code of Conduct that flexibility service providers can sign up to. The Code is being developed through a process of market analysis and stakeholder engagement led by Scottish and Southern Electricity Networks (SSEN) Distribution with Flex Assure. In addition, the Centre for Sustainable Energy (CSE) has run qualitative research with groups of households to discuss their concerns and expectations about flexibility service providers. These insights are now being used by the HOMEflex team in drafting the Code.

¹ https://smarter.energynetworks.org/projects/nia_ssen_0061

² <https://www.nationalgrideso.com/industry-information/balancing-services/demand-flexibility/approved-provider-list>

³ https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Demanding%20attention_2022.pdf

Research design and results

Households have different capabilities and motivations for flexing their energy demand. CSE's 'Capabilities Lens' recognises a range of factors influencing a household's ability to engage with and benefit from flexibility products and services⁴. The HOMEflex Code of Conduct aims to recognise these potential differences and incorporate this insight into the Code. Therefore, the qualitative research was structured to elicit insights from households with a very broad range of smart energy capabilities. The research team recruited people with different housing situations, domestic routines and caring responsibilities and who had different types of appliances and attitudes towards technology. Participants were split into four groups determined by income level and their confidence towards energy and digital technologies (Figure 1).

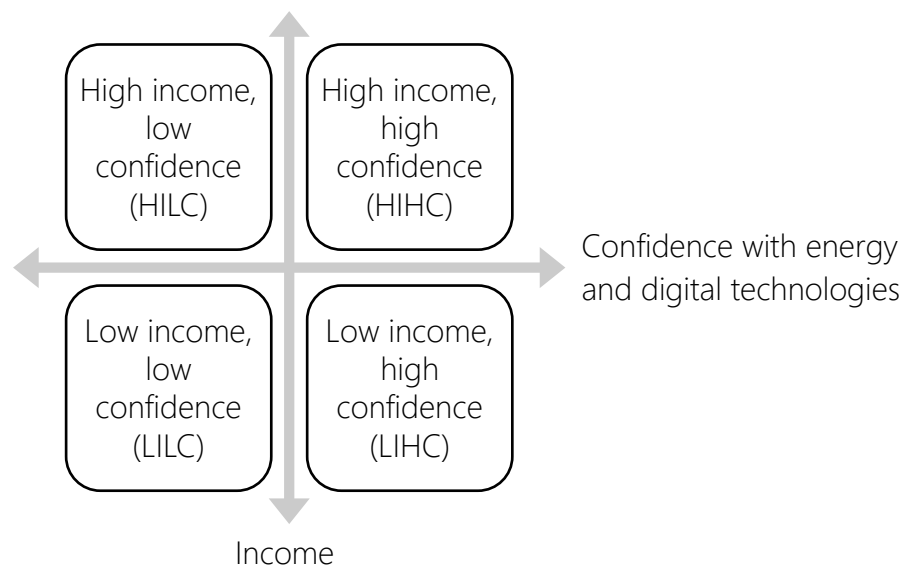


Figure 1: Focus group structure

Two rounds of focus groups were conducted with 19 participants in total. The first round of focus groups covered consumer concerns around three different flexibility services of increasing complexity; the Demand Flexibility Service (DFS), a battery offer with a grid services package and a home energy automation service. The second round sought feedback on the draft Code of Conduct and the topics it covered. Transcripts of focus group discussions were analysed thematically.

Quotations from focus groups are presented throughout by participant number and focus group: so, for example, P1 HIHC would be participant one at the High Income High Confidence group.

Discussion at the first round of focus groups raised a number of key concerns.

- All participant groups struggled to understand the technicalities of the flexibility services discussed, which informed associated concerns around safety, convenience and calculating potential financial benefit

⁴ <https://www.cse.org.uk/downloads/reports-and-publications/policy/energy-justice/smart-and-fair-phase-1-report-september-2020.pdf>

- Participants also reported being wary about comparing different offers in a flexibility market and taking up services from unknown or untrusted providers
- Some participants questioned the value of flexibility services as an approach to tackling energy issues

The Demand Flexibility Service (DFS) was one of the examples discussed in the first round of focus groups. All participant groups reported that, of the three examples presented, they were most likely to take up the DFS.

The one I think I might go with is the Demand Flexibility Service. The other two options [require] capital but even if I could afford it, I don't think I would. **P4 LIHC**

Key benefits reported were the ease of taking up the offer, the direct financial incentive and lack of punitive measures. Key concerns included how the DFS would work with routine or household dynamics, safety and the quality of incentive offered.

Discussion at the second round of focus groups started by gathering general participant views on consumer codes and standards.

- Participants agreed that the most effective protections were mandatory and 'had teeth'
- Lower confidence groups were more likely to report codes and standards impacting their purchase decisions

Following discussion of the draft Code of Conduct at the second focus groups:

- 17/19 (89.5%) participants reported in a poll that they were either very or fairly confident about taking up a flexibility service. This was five more participants than had reported confidence after the first focus groups.

Insights for the Code of Conduct

The remainder of discussion at the second round of focus groups was structured around the five main headings of the draft Code of Conduct.

Sales and Marketing

Participants were positive about the draft Code of Conduct statements shared around Sales and Marketing and said they were a 'great starting point'.

Most comments on this heading focused on clarity of financial reward. Participants wanted financial information to be tailored to specific household circumstances, to indicate timeframes of benefits and to acknowledge any relevant uncertainties in forecasting.

You don't want to feel like you are being duped by these claims and I'm sometimes concerned they are too good to be true. I want to know with my home and my situation, am I actually going to save that? **P4 HILC**

Other comments included specifying geographic limits of service provision and measures to facilitate comparison. Overall, low confidence groups shared fewer views on Sales and Marketing.

Contracts and Terms and Conditions

Participants felt that the draft Code of Conduct addressed a comprehensive range of contractual areas and issues. A key theme of discussion around this heading was making sure Terms and Conditions are concise and easy-to-read. Several participants shared that they did not normally read Terms and Conditions. Some specific suggestions were raised for maximising the accessibility of any Terms and Conditions and bringing them forward in the consumer's decision-making process. One participant felt there was a role for accreditation to play in scrutinising Terms and Conditions so that consumers could have confidence in them:

I expect whoever they are accredited by to have gone through the Terms and Conditions with a fine-tooth comb so we are not getting ripped off in the small print. P2 HILC

Other key areas of discussion included transparency on financial elements, clarity around insurance and guidelines around what happens in case of supplier insolvency.

Technical Due Diligence, Data and Cyber Security

Participants from low income and low confidence groups shared the most comments about technologies. They were keen that any technologies or services were properly explained and, where possible, standardised in terms of warranties and compatibility.

Most participants were happy with flexibility services to simply comply with existing regulation with regard to data and cyber security. Several participants felt that they wanted providers to provide some insight on their energy data: for example, providing tips for maximising savings.

I guess in terms of sharing the data, it would be important that there was feedback on the data. Perhaps ... you're no longer benefitting from it [the service] because your energy use has dropped below the threshold required to make a gain from such a system, which might not have occurred to you.

Obviously if they [provider] can see your data then they've got that opportunity to feed back to you, so they're not just sitting on a secret. P3 HIHC

Complaints and Redress

Participants in all groups cited the need for an independent body (an ombudsman or regulator) to deal with complaints and redress and enforce standards. This was deemed especially important for services involving multiple providers.

Then you've got that confidence that if your energy supplier or whatever are not taking it seriously enough or not doing what you think they should, you

have the option to take it to an independent entity. I think that would give me some confidence. **P2 LILC**

Insolvency was a concern raised by three participant groups. Participants wanted regulation to protect them in case of a potential break-in service, for example a requirement for providers to have a back-up plan for service provision if they cease trading. They also wanted regulation to take account of whether providers have a history of insolvency. Participants shared some general thoughts around best practice in terms of effective complaint and redress procedures.

Ethical Considerations

Participants shared some specific feedback on the draft guidelines around Ethical Considerations. Participants requested more clarity around: how the ability to manage financial risk was measured, which customer vulnerabilities are included in consideration, and what constitutes inclusive design.

Generally, participants were reassured that the Code of Conduct encompassed thinking about equity and fairness and agreed on the principle that services needed to be recommended to suitable consumers.

If my home is wholly unsuitable I would expect them to tell me and not just install something and say it is going to work and take the money and leave me with no benefit. I suppose the point is just making sure it is the right system for the right people. **P4 HILC**

One participant suggested that the right to switch from a long contract, especially for vulnerable consumers, could be included in Ethical Considerations.

Next steps

The insights summarised in this report are being used by the HOMEflex team in the drafting process for the Code of Conduct.

Introduction

The flexibility market for domestic customers is a new but growing part of the UK's energy market. Innovative products and services that allow domestic consumers to shift their energy demand and benefit from cost savings, efficiency gains or financial rewards are being brought to market by established energy sector actors as well as new entrants. The speed of innovation is delivering an increasingly complex array of offers that combine new digital technologies with new tariffs or services to create value in new markets. For example, Winter 2022-23 has seen National Grid ESO launch an entirely new Demand Flexibility Service (DFS) which domestic consumers can access through their existing supplier, or another party. There are currently 26 registered providers, 16 are offering the service to domestic consumers, with different terms and conditions and passing on different proportions of the incentive⁵. This demonstrates that while there is a real and immediate opportunity for domestic consumers to benefit from a more flexible, more renewable energy system, there is also a risk that consumer protection is not keeping up with market innovation.

A report, published in January 2021 by Citizens Advice, Energy UK and the Association for Decentralised Energy⁶, analyses the extent to which existing policy and legislation address the potential risks posed to consumers by a growing market for new and innovative energy flexibility propositions. Most areas of potential risk are found to have limited or no protection under existing regulation. In addition, the Centre for Sustainable Energy (CSE) published "Smart and Fair?", highlighting the mechanisms by which vulnerable, fuel poor and others could be left behind in the transition to net zero.

This is of concern for DNOs, Stakeholders, Government and to those customers that may be able to provide this demand flexibility. The current lack of standards and assurance mechanisms could risk limiting customer uptake due to lack of trust, and could ultimately lead to negative outcomes and publicity, undermining trust and participation in flexibility markets.

To address this Scottish and Southern Energy Networks (SSEN) in collaboration with The Association for Decentralised Energy has set up the HOMEflex project, to develop a "Code of Conduct for Domestic Flexibility Services". The code will cover the main areas of consumer protection, sales and marketing, contracts, terms and conditions, complaints and redress. It will also include ethics, and make fairness and inclusion key principles of service provider conduct. Creating a Code of Conduct now means that trust can be built from the very birth of the market and promote the development of a healthy, inclusive, fair and transparent marketplace. The Code sets out principles which could later be turned into the basis for an accreditation mechanism. The Code itself can be used by procurers of flexibility services to give them the

⁵ At the time of writing (19th December 2022) NG ESO listed 26 registered providers for the DFS of which 16 were offering the service to domestic customers to [Approved Providers List | National Grid ESO](#)

⁶ [Demanding attention - Managing risks with demand-side response, to improve consumer experience tomorrow.pdf \(citizensadvice.org.uk\)](#)

confidence that they are procuring ethically and by providers to demonstrate their credibility in this field. The Code should help domestic consumers feel confident in signing up to services being offered by a compliant provider. This report presents the findings of qualitative research to address that question.

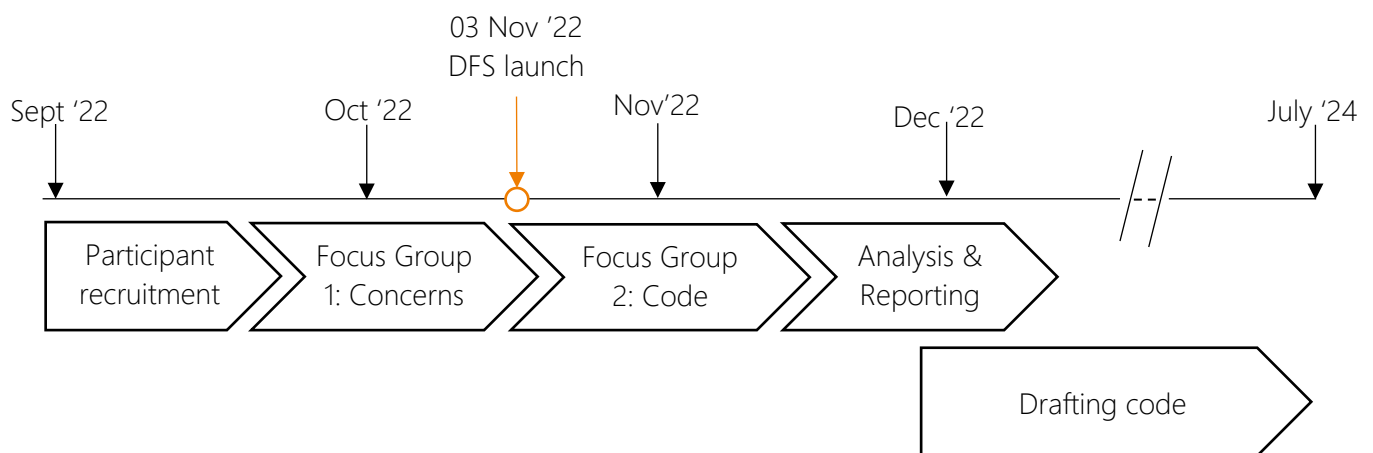
Objectives of study

This study explores how to build consumer confidence in the emerging flex market. The study was designed with two objectives. First the research aimed to elicit a range of consumer views about the types of flexibility services appearing in the UK market and the extent that a Code of Conduct could address any emerging concerns. Second the research aimed to elicit suggestions for improvements that could be used directly in the drafting process.

Overview of research activities, time scales and reporting

Figure 2 provides a timeline of the qualitative research activities showing that the DFS was launched during the research period. The drafting process for the Code of Conduct started in December 2022 and will continue until 2024.

Figure 2: Overview of research activities and project timeline



Structure of the report

This report is divided into three sections:

Section one provides a summary of the method used to elicit participants' perceptions, followed by an overview of the results which outlines the concerns consumers raised, their confidence at taking up offers and specific discussion on the DFS.

Section two goes into detail in the five main areas of the draft Code of Conduct: 1) Sales and Marketing, 2) Contracts and Terms and Conditions (T&Cs), 3) Technology due diligence, data and cyber security, 4) Complaints and Redress, and 5) Ethics. For each issue we present our

analysis of the discussions held by the four focus groups, structured by theme. We provide verbatim quotes from focus group participants where insightful and specify the recommendations or changes in the Code that were made by participants.

Section three consolidates the insight from the research and lists suggestions to be taken into account by the HOMEflex steering group and team as they prepare the Code of Conduct.

Appendices following the report provide the full detail of the methodology.

Section 1: Research Design and Results

Research design

Full methodology details are included in the Appendices.

Sampling framework & recruitment

Following a literature review, a sampling frame was designed to recruit workshop participants from across the SSEN area who may have different needs and preferences in relation to flexibility services. Nineteen participants were recruited in four groups according to two characteristics: income and energy/digital confidence. The four groups were: Low Income, Low Confidence (LILC), Low Income, High Confidence (LIHC), High Income, Low Confidence (HILC), High Income, High Confidence (HIHC).

Focus Groups

Two rounds of focus groups were carried out with the four participant groups. The Round One focus group presented an overview of energy system flexibility and presented three flexibility offers currently available in the UK market. Participants discussed these offers and answered polls to gauge the types of concerns they may have. The Round Two focus group focused on the draft Code of Conduct. Participants discussed the extent to which the Code of Conduct affected their confidence in the emerging market and what else should be considered by Flexibility service providers.

Qualitative analysis

Transcripts of the focus group discussions were analysed thematically using a combined of inductive and deductive coding. The results were compared across the four groups and differences were highlighted. Coding was completed by one researcher.

Summary results

Thematic analysis of Round One focus groups: consumer concerns on flexibility offers

Round One focus groups centred on discussing three current flex offers of increasing complexity: firstly the DFS, then a discounted battery with a 10 year grid services contract, and finally a home energy optimisation platform that incorporated home energy storage, PV and a heat pump.

The participants discussed these three offers and a summary of the main points are shown in Table 1. The most common concern across the groups was the complexity of the offers and the difficulty for consumers to gauge the level of financial benefit they would be likely to see. Safety

and convenience concerns about the unknown technology was also a key topic of conversation. Participants wanted information and reassurance on key features of technologies such as noise levels and safety of equipment. Remote control of existing devices was also considered a safety risk. This suggests an opportunity or need for HOMEflex to deliver trusted advice about types of technologies and their operation to deliver flex services.

Table 1: Consumer feedback (Round One) on flex services: coding reference count for thematic analysis by group

Code theme	HIHC	LIHC	HILC	LILC
Comments on the offers				
Offers are too complicated	3	2		2
Advances in technology impacting cost savings over the duration of the offer		2	2	1
Need for trusted provider		1		1
Safe & convenient remote operation of new and existing technologies	5	1	1	
Concerns that others won't opt in		1		
Nothing left to flex	2			
Alternatives to individual flexibility				
Use community storage, not individual flex	1			
Reduce demand & ramp up building regs	1		1	1
General concerns with the energy market				
Energy price volatility		1		
Lack transparency in existing energy bills and charges		2		
Difficulties with energy efficiency installs and grants processes		2		
Difficulties in identifying or managing energy savings	1			

Given the unknown nature of flexibility services, participants emphasised the importance of having trusted independent advice on services as well as the need for service providers to be trustworthy. Recommendations from independent agencies like Energy Saving Trust, Money Saving Expert and Citizens Advice were welcomed. Participants preferred well-known energy suppliers rather than relatively unknown providers, reflecting cautious behaviour following the spate of recent energy supplier insolvencies. Moreover, participants expressed a desire for fewer schemes and suppliers, common standards across the industry and standardisation of services so that consumers could make easy comparisons. They wanted an emphasis on professionalism and customer support to establish trustworthiness of services and providers.

Broader issues about the current energy price crisis and lack of trust or confidence in the current energy market featured in the groups' discussions, affecting how participants thought about the likelihood of realising benefits through the flexibility market. In addition, participants from three of the four groups questioned the basic premise of flexibility offers targeting individual

consumer flexibility, and pointed to a wider need to reduce demand, improve the energy efficiency of homes and look at collective strategies to manage energy.

I don't think it's encouraging people to think about their energy usage and their impact on the environment. I think it's just trying to make it less involved from a consumer point of view of actually being in control of your usage and trying to bring that down as a country, as a kind of global community. There's no incentive there to think about what you're using. **P5 HIHC**

Thus, participants questioned the approach to flexibility services, raising pertinent observations about its usefulness and efficacy. This indicates a need for HOMEflex to communicate the environmental and societal gains that stem from a more flexible energy system as well as evidence the extent that different products and services deliver these broader benefits.

Poll results

Participants responded to a series of polls throughout both Round One and Round Two focus groups. Full poll results are included in the Appendices.

At the end of both focus groups, participants responded to the question: 'Right now, how confident would you be of taking up one or more of the flexibility offers we've discussed? (Assume you would be able to afford any upfront cost)'. Results from Round One and Two are summarised in Table 2 and Table 3 below. Percentages have been rounded in tables throughout this report, so may not sum to 100%.

Table 2: Round One focus group confidence poll results

Response	LILC	LIHC	HILC	HIHC	Total	%
Very confident	2	0	2	1	5	28%
Fairly confident	1	4	1	1	7	39%
Not confident	1	0	1	1	3	17%
Not confident at all	0	0	0	1	1	6%
Don't know	0	1	0	1	2	11%

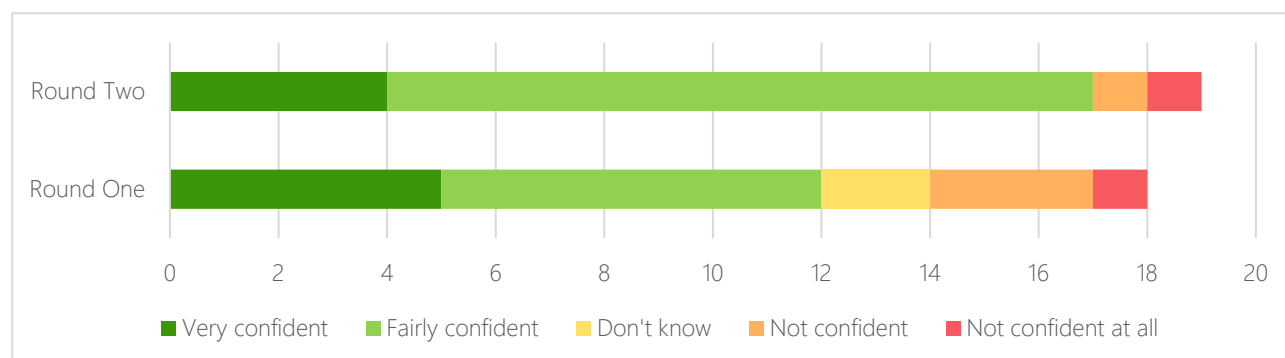
In Round One, across all groups, 12 participants (67%) were either very (five, 28%) or fairly (seven, 39%) confident. Four out of five of the participants who reported being very confident were from the two low confidence groups.

Table 3: Round Two focus group confidence poll results

Response	LILC	LIHC	HILC	HIHC	Total	%
Very confident	3	0	1	0	4	21%
Fairly confident	1	4	4	4	13	68%
Not confident	0	0	0	1	1	5%
Not confident at all	0	0	0	0	1	5%
Don't know	0	0	0	0	0	0%

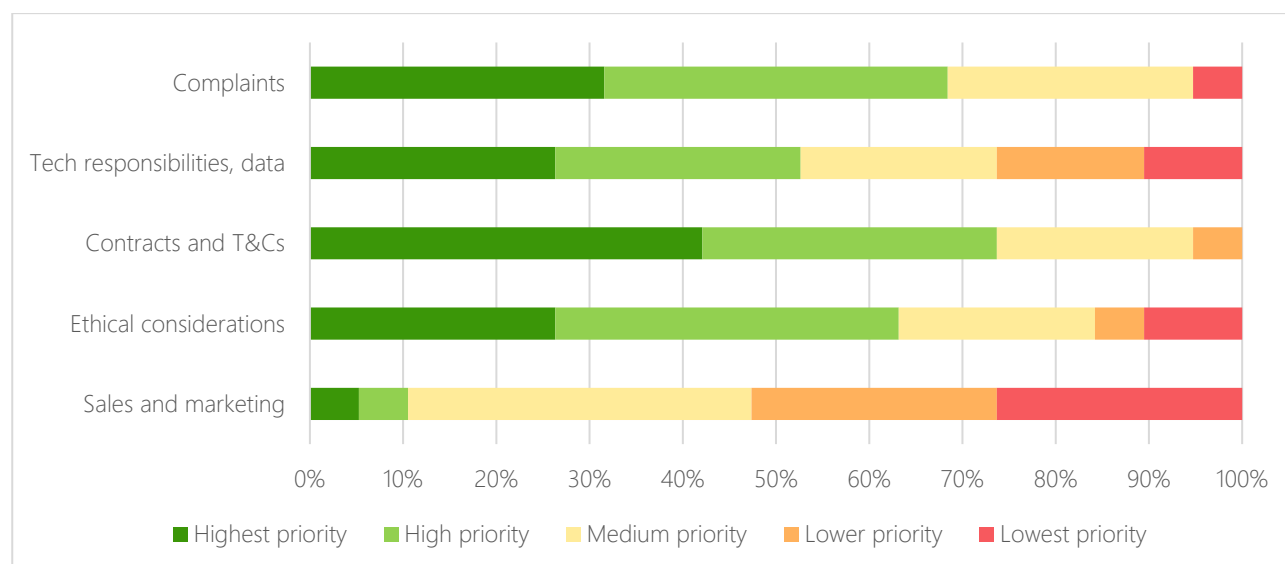
In Round Two, across all groups, 17 participants (89%) were either very (four, 21%) or fairly (13, 68%) confident. Thus, compared to the Round One focus group poll results, five more participants felt confident about taking up a flexibility offer after the Round Two workshop, although one less participant felt very confident. As in Round One, participants reporting they were very confident tended to be from low confidence groups (4/5 for Round One, 4/4 for Round Two). Figure 3 summarises responses to the confidence poll from both rounds of focus groups.

Figure 3: Comparative confidence poll results from Round One and Round Two focus groups



At the beginning of the Round Two workshops, participants were also asked to rate headings of the Code of Conduct by priority. Summary results are included in Figure 4 below.

Figure 4: Code of Conduct by priority in Round Two focus groups



Contracts and Terms and Conditions was ranked as highest priority by the highest proportion of participants (8, 42%). Sales and Marketing was ranked as highest priority by the lowest proportion of participants (1, 5%).

There was some variety in responses by participant group. Technical Due Diligence, Data and Cyber Security was ranked as either highest or high priority by all participants in the High Income Low Confidence group. Full details of results by participant group are available in the Appendices.

Thematic analysis of Round Two focus groups: feedback on HOMEflex draft code of conduct

Table 4 shows the number of coding references from thematic analysis of second workshop transcripts. In coding, some data was coded multiple times if it referred to more than one heading.

Trends are observable between groups on main headings, for example:

- Sales and marketing – high confidence groups gave most feedback
- Complaints – low confidence groups gave most feedback

Reporting in the next section explores the thematic content and briefly identifies any common themes across and between groups. For example, nearly half the references in the Contracts and T&Cs section focused on the need for concise, accessible documents, which participants from all groups commented upon. In contrast, comments just on complaints as a sub-theme of Complaints and redress as a main topic area were made primarily by the LILC and HIHC groups.

Table 4: Consumer feedback (Round Two) on main headings of the Code of Conduct, number of coding references by participant group

Heading	LILC	LIHC	HILC	HIHC	Total
Sales and marketing	3	6	3	12	24
Ethical considerations	5	3	3	2	13
Contracts and T&Cs	8	9	8	8	33
Tech due diligence, data and cyber security	8	8	3	2	21
Complaints and redress	10	4	9	7	30
Total	34	30	26	31	121

Consumer relationship to trust marks

As an introductory topic prior to specific feedback on the HOMEflex draft Code of Conduct, focus group participants were asked what they thought about consumer codes and standards in general.

All participants agreed that the most effective consumer codes and standards 'had teeth'. They had the most confidence in standards that were a legal requirement for all suppliers within a certain area to sign up for. Participants felt voluntary standards were less meaningful.

We can all aspire to live by codes but if nobody is going to bring you up on it what is the point as a consumer for a company to have that; it means nothing in practice. **P4 HILC**

Low confidence participant groups were more likely to report consumer codes and standards had an impact on their purchase decisions. For one low confidence participant this applied even if they didn't know what the code or standard related to.

I was just going to say, I don't really know what a lot of them mean but if I was to see a few different stamps on something I would definitely trust it just for seeing that. **P4 LILC**

Participants also distinguished between legally required standards, consumer protections, and trust-marks or consumer recommendations. Participants reported that they expected suppliers to operate in accordance with legal standards and that consumer protections would help them to feel more confident about taking up a product or service. Trust-marks or consumer recommendations were reported as less important factors in decision-making: although they could be a positive sign, their absence wouldn't necessarily be a cause for concern.

Some participants also raised concerns about the trustworthiness of codes and standards. They wanted to be sure that adherence to a certain code or standard couldn't be faked by an unscrupulous supplier.

This general discussion of codes and standards raised the following suggestions to inform the HOMEflex Code of Conduct:

- Clarify which products, services and tariffs need a trust mark and therefore the providers for which the Code is applicable
- Create and promote a searchable database of providers
- Require providers to have publicly accessible independent reviews of their products and services
- Instigate a mandatory rather than a voluntary code, backed up by an independent standards authority

Demand Flexibility Service

Round One focus group discussion: overall

As part of the Round One focus groups, participants shared thoughts on the new Demand Flexibility Service (DFS).

Of all three flexibility service examples presented, participants felt most positively about the DFS.

The one I think I might go with is the demand flexibility service. The other two options [require] capital but even if I could afford it I don't think I would. **P3 LIHC**

Most reported that they would be happy to take up the offer. Key perceived benefits of the DFS were the ease of taking up and using the offer and a lack of any punitive measures for not making the most of the offer. The direct financial incentive associated with the offer, even if small, was also cited as significant given the current energy market and cost of living crises.

...it's not such a large amount of money but at the end of the day, it's something that you get for free let's say. **P5 HILC**

One participant also commented that the prospect of collectively helping to balance national demand was attractive, especially if it could benefit those in need.

Also it feels collectively we're helping each other out if households can during those times reduce consumption. It means somebody else is going to benefit and reducing the demand. So collectively, I think it's a good idea. **P1 HILC**

Round One focus group discussion: concerns

Although overall, participants felt positively about the DFS, some expressed some concerns around taking up the offer.

Routine

Most participants recognised that their success in taking up the offer would depend on how well the DFS aligned with their normal routine. Some commented that minimising electricity usage in peak times already fit well with their schedule. One of these participants felt that this could be unfair for people with different routines.

I've got an office-based job so I can work from home but if you're Bob the builder who comes home at 6 o'clock from work, he can't do his washing during the day can he, so people would feel it was a bit unfair then. **P4 HIHC**

One participant also highlighted that, if someone already had low usage in the given time period, their capacity to financially benefit from the DFS would be limited.

So say somebody's on night shift, they don't consume anything, and that's their standard pattern. If they then continue not to consume anything during that period, do they not get a reward because really they haven't changed any of their habits? **P4 HILC**

Another participant also commented that there was a risk of excluding groups who needed to rely on electricity for medical reasons.

And I guess there's another bunch of people who will be...could be worried by this, you know, because if actually they need to stay warm, they've got appliances, they've got to run for their health they might be worried that this is in some way a bad thing and, you know, could perceive that what they are doing is either wrong or they, you know, they can't benefit and they're therefore, you know, these are probably already quite vulnerable people. They might perceive that they are in some way being sort of disadvantaged out. **P3 HIHC**

Other participants also reported that they would struggle to shift certain activities out of peak times, especially if periods lasted a long time.

So are we talking just a few hours in the evening or would it be the whole night? Is it going to be from sort of four pm till ten? That is a big chunk where

you know, you need to be doing stuff. Nobody's going to be sat with a TV off in the dark, cold you know. **P4 HILC**

Household dynamics

Some participants also suggested that their household dynamics might prevent or limit their participation in the DFS. One participant shared that, if her son still lived with her, she would struggle to participate as he had refused to limit his usage in the past. Other participants commented that having young children limited their capacity to shift usage.

I would opt in but I've got a busy household – there's 5 of us – and with little ones, they love their gadgets, so TV and consoles, so that's where it would be a little tricky. **P5 LIHC**

I've got two wee kids so certain things need to happen in that sort of peak time. **P4 HILC**

Smart meters

No participants reported that they had any concerns about sharing their energy data to take part in the DFS. Nonetheless, some raised some other concerns around smart meters. One participant commented that they currently couldn't get a smart meter installed.

My only two concerns is I don't have a smart meter. Not because I don't want one, it's very difficult to get a) smart meters in Orkney and b) it's really difficult for people even to get a meter changed... **P4 LIHC**

Other participants reported a general lack of confidence in smart meters.

I'd read some reviews that people were being overcharged and I just couldn't afford to be overcharged... **P3 LILC**

Safety

Several participants in one focus group voiced concerns around the potential risks of setting appliances to run unattended overnight. Two participants had had prior experience of a washing machine catching fire:

Like [her], I have also had a washing machine go on fire so I never run anything overnight. I wouldn't be prepared to do that just safety wise. **P4 HILC**

Quality of incentive

Several participants commented that the financial reward associated with the DFS would have to be sufficient enough to motivate them to monitor and shift their consumption. Without this incentive, they felt some consumers would not take up the offer.

The observations I would have would be, the level of incentive to actually behave in the way that the supplier would like me to. It has to be worth my while to be constantly monitoring my text messages and monitoring my consumption. There is only so much I can automate I guess, as a relatively

automated person. There would have to be a level of materiality to the reward to the consumer. **P2 LIHC**

Several participants also highlighted that they had generally reduced their usage in the context of the energy market and cost of living crises, so their scope to benefit would be reduced.

Notice period

Some participants raised concerns about the amount of notice they would give before a period would start. They felt that the more notice they could have, the better.

Yes absolutely. I'd certainly participate. I mean, I think there is some questions there about the amount of notice that you're given, for example... because you know, five minutes, obviously not enough but you know it may be difficult for them...for the system to give you four hours' notice. **P3 HIHC**

Round Two focus group discussion: uptake of DFS

As in Figure 2, the DFS launched between the Round One and Round Two focus groups. There was a brief discussion at the outset of the Round Two workshops about the DFS. No participants reported taking part in the DFS.

Code of Conduct assessment

Following the Round One focus groups, a brief assessment of a Demand Flexibility Service provider contract was carried out to learn whether it met the HOMEflex draft outline for a Code of Conduct, parts of which were shared with focus groups. The contract and T&Cs met some of the HOMEflex conditions, including:

- Clear and accessible terms and conditions, including:
 - Technology requirements
 - How the customer could participate
 - Lack of penalties
 - Skills and effort required by the customer to be able to fulfil the contract and maximise benefits
 - Financial benefits and how these would be calculated
 - Time and duration of the contract
 - How data would be used, shared and stored
 - A single point of contact

However, the provider could cancel or amend the service without notice and changes would only be available on their website. This could be interpreted as excluding customers with limited internet access. In the event of a dispute the provider's decision was final with no correspondence entered into. There did not appear to be redress in the event of a customer query about energy reduction calculations.

The provider contract offered customers payment of £2.25 per kWh of electricity usage reduced. By comparison, the research team also found a different provider (an energy app) was offering their customers £2.40 per kWh of electricity usage reduced.

Section 2: Feedback on Code Chapters

Sales and marketing

In the Round One workshops concerns about sales and marketing were raised by the high confidence groups, particularly the HIHC group. Two major concerns were expressed: clarity around marketing claims and the methodologies used and clarify around who benefits from flexibility services.

You just don't have the time to be investing, to spend time trying to work out about the adoption of a certain kind of technology, and doing all kinds of forecasts around how I'm behaving now, how I might behave in the future, assumptions around cost of energy in the future, to make that kind of decision.

P2 LIHC

In the Round Two focus groups, participants were asked for their views about statements from the draft HOMEflex Code of Conduct on sales and marketing. The statements reflected participants' concerns voiced in the first round of workshops, primarily around financial forecasting and requirements to engage in services e.g. upfront costs, technical requirements or upgrades / work needed for sites.

Overall, participants responded positively to the draft statements shared and said they were 'a great starting point'. Clarity over the level of financial impact was the main interest, in particular how to gauge the relative costs and benefits.

Tailor predicted savings to household circumstances

Financial forecasts were the main issue for participants. In the HILC group a participant expressed a desire for tailored, honest financial forecasting, and transparency on who was going to benefit most.

You don't want to feel like you are being duped by these claims and I'm sometimes concerned they are too good to be true. I want to know with my home and my situation, am I actually going to save that? I suppose if they [flexibility provider] are promising to be realistic and don't sugar coat it too much, just be up front about what cut they are taking, I think it will go down well. P4 HILC

The need for tailored financial forecasts for flexibility services reflected in particular differences in service provision experienced by those in more remote parts of Scotland. The groups wanted financial forecast that accounted for geographic differences that impacted energy use (for example differences in daylight hours) and accounted for differences in housing and occupant

behaviour. This could overcome 'sweeping statements' that a service will benefit consumers more than it actually does because of their circumstances.

I think there needs to be much more, a much greater level of detail in order that we can assess that it [a flexibility service] is actually appropriate for us. P3 HIHC

Participants suggested several approaches. One option was to use illustrative examples relevant to different housing or occupancy types for basic marketing after which interested consumers could obtain information specific to their circumstances. Another was for consumers to generate tailored financial forecasts on flexibility services, such as product / service comparison websites (as for tariff comparisons), which require a bit more work from the consumer to enter their data. A third option was for consumers to share their energy usage data with providers for a no obligation quote, to obtain a 'real life forecast' of potential savings.

Acknowledge price uncertainties

The impossible challenge of financial forecasting in a period of energy price instability was also discussed. Given how hard it would be for providers to predict a consumer's financial benefit in three, five or 10 years' time, one HIHC group participant suggested the HOMEflex Code of Conduct:

Make it very clear that the likelihood of price changes is huge and therefore, a bit like you see when you sign up for some investment products, prices can fall as well as rise. [Include] a statement like that and possibly even an illustration of what could happen if prices rose by 10%, by 30% or by 50% which would give people a range of ideas rather than just say this is the market price today and this is what you could save on this current market price. P3 HIHC

Include the timeframe for benefits

Another request for the HOMEflex code was for providers to include clear guidance in marketing on financial gains at different stages of a contract and the implications for a consumer if they were forced to terminate the contract. For example, a ten-year battery with services package with long pay-back period would back end financial gains for the consumer, with implications if their circumstances changed.

Some kind of indication as to what would happen if we cancel the contract after one year, three year, five year, eight years or let it run because it looks lovely that you're going to save £500 over ten years, great, a nice number, but actually are we going to save most of that money in the last three years? P3 HIHC

Specify geographic differences in service provision

A doubt voiced by participants was whether the quality of service provision would be uniform across the country, for instance in rural areas where the installation of smart meters was reported to be patchy. This raised an equity issue, as the price of electricity varies across the UK,

sometimes with rural areas (e.g. the Scotland islands) suffering from higher electricity tariff rates. A participant also questioned whether the quality of service would be the same for all, with a pertinent comparison to broadband contracts.

Are any of these [marketing claims] going to be caveated by 'up to this' and 'up to that'. It is a bit like the mobile broadband contracts where they promise you, you will have fantastic broadband and one person in the street may have fantastic broadband but for the rest of you it is rubbish. **P3 HILC**

Facilitate easy comparison across services including carbon impacts

In the LIHC group a participant said that standardising the way in which marketing information was presented could help consumers to make easy comparisons. In particular, three measures - energy reduction, carbon emissions and annual energy bills – quantified on a scale would make it easy for consumers with different motivations to understand the benefits of a product or service.

People will not just be motivated by the financial saving. Some people will be motivated by the carbon emission reduction so I'm wondering if you can have a way of graphically showing all those factors together and what does it actually mean. I think people understand visuals a bit better than a whole table of numbers. We know that pound savings are going to change often. **P2 LIHC**

The topic of greenwashing was also raised. It was requested that the Code of Conduct should have a standardised industry-wide way to present carbon impacts, given the trust placed by time-poor customers in green claims on company websites.

I think it would be quite important to have some kind of quantifiable.... Like one company may say, oh we plant one tree for every customer, another company may say we offset ten tons of carbon per day, there is no way of comparing what someone is actually doing, how effective those things are. So maybe if there was some kind of standardised way of measuring it [carbon impact] in the industry so that you're not so confused. **P5 HIHC**

This would aid consumer understanding and avoid information overload.

The limitations of Sales and Marketing information

One participant shared that they wouldn't read marketing materials as it was too much information. They trusted in the competitive market, assuming that they could 'vote with their feet' and switch provider if they were discontent with services. They considered that competition ensures that energy suppliers treat customers fairly.

In real life, I wouldn't really be interested in any of it, I'd just look for a green company and I do just trust and believe that companies do the best thing, I just always have, because there's so much competition in the market now, I've

always felt that that would be guiding force in getting companies to give you the best prices and do the right things. So it wouldn't ever be something that would even cross my mind at all, to be honest with you. **P2 HIHC**

This participant expected large outlays to be policed by relevant agencies but was happy to research small purchases on supplier websites themselves.

This raises essential points for a Code of Conduct, given that consumers may not be able to change flexibility providers easily or without incurring exit fees, and that competition in the energy market has not resulted in suppliers treating customers fairly⁷. It implies that, in sales and marketing, termination of the contract, fees, liabilities and complaints processes should be discussed with consumers to provide clarity.

To promote greater inclusivity in marketing, participants in one discussion suggested the following process. Show that the product / service is (A) Available to everyone; (B) Accessible to everyone; (C) then follow up with a simple discussion on the contract, liability and an illustration of what it could do for that potential customer.

It is notable that the low confidence groups expressed fewer views on sales and marketing than the high confidence groups. The LILC group reiterated the importance to be clear on upfront costs and identify any additional technology needed in sales and marketing. Information on the lifetime of equipment (e.g. battery) was also considered essential.

Recommendations to consider for Sales and Marketing to support consumer protection in flexibility services

Consumer concerns and feedback on sales and marketing raised the following suggestions to support consumer protection in flexibility services.

- Highlight to providers the need for, and benefits of giving consumers tailored financial forecasts for flexibility services. This could include basic marketing followed by an in-depth no obligation assessment based on customer housing, occupancy, location, and current services. It could also incorporate a 'real life' assessment based on the customer's energy usage data, if the consumer has access to and is willing to share their data
- Support the use of 'comparison site' type tools to enable consumers to compare services
- Be transparent on financial benefits for the consumer and other parties
- Promote community, wider UK and environmental benefits of services
- Require providers to clearly state the limitations of financial forecasts given the volatility of energy prices and resultant flex revenues. Ensure that providers include a disclaimer statement on price changes, and illustrations of the financial impacts for set variations in price (e.g. 10 / 30 / 50% change in price or revenue)

⁷ Competitions and Markets Authority (2016) Energy Markets Investigation Final Report, Crown Copyright, London

- Require providers to include the financial implications of terminating a contract (particularly a longer contract with high initial consumer outlay) at different time stages
- Clarify whether services and support are universally available, for instance speed of technology operation and location
- Initiate a standard method for presenting carbon impact e.g. kg of carbon reduction / year or kilowatt hour
- Initiate a standard visual method for presenting energy reduction, carbon impact and effect on fuel bills to help consumers with varying motivations in decision-making
- Discuss termination of the contract as an integral part of sales and marketing to avoid drawing people into a service agreement that may not suit them if their circumstances change
- Promote an inclusive, straightforward marketing process to show if the product /service is (A) Available to everyone; (B) Accessible to everyone; (C) then follow up with a simple discussion on the contract, fees, liability, fees, complaints processes and an illustration of what it could do for that potential customer. This will help to ensure that consumers are informed about essential product / service information without having to do further reading or research themselves

Contracts and Terms and Conditions

In the Round One focus groups, cost was the major concern expressed across all groups in relation to contracts. The low-income groups expressed the most concerns, particularly whether a service was worth it financially in the long term. The high confidence groups both highlighted how complicated it was to assess long term financial benefit if considering a capital purchase and reduction in ongoing costs. Low confidence groups raised concerns around liability for equipment, particularly relating to the availability of phone support, repairs, and warranties (see Table 23 in Appendix 3).

The LIHC group supported standardisation of services across suppliers as a means to simplify the market and prevent consumer confusion. It also advocated for standardisation of contracts / T&Cs to aid consumer understanding of services.

In the Round Two focus groups, participants were presented with the key contractual areas and terms and conditions currently included in the HOMEflex draft Code of Conduct (listed below). In general participants felt these were comprehensive.

1. Tech / other needs
2. Costs / penalties
3. Benefits / Risks
4. Customer support
5. Contract time, and how to withdraw
6. Time limitations / bands / notice e.g. turn down periods
7. Customer control of appliances
8. Fee structure / revenue sharing
9. Ownership of equipment
10. Liabilities
11. Insurance
12. Data use and storage

Easy to read T&Cs are required

The focus of discussion across all participant groups was on making contracts and T&Cs concise, accessible and easy to read. Participants also expected any accredited provider to have had its documents checked by the accrediting body.

I feel that if you are taking a policy out with somebody, the accreditation gives that reassurance of a warm fluffy feeling about the contract and T&Cs. Not many people read all the fine detail but when you have got that accreditation, to me, I expect whoever they [provider] are accredited by to have gone through them [contract and T&Cs] with a fine-tooth comb so we are not getting ripped off in the small print, it is all upfront and fair....and it may be naïve of me but I think that gives me the feeling that I don't necessarily have to [read the small print], wrongly or rightly. P2 HILC

Participants, one of whom had studied marketing and was familiar with technical literature, gave practical suggestions to address this, given in more detail at the end of this section:

- Bring forward customer access to the T&Cs earlier on in the decision-making process, including information on termination of contracts as previously raised under sales and marketing
- Provide a plain English, jargon-free standard template Key Facts document with headline bullet points and a second document with the finer details

I think if there was a standard template for every provider it makes it a lot easier for consumers with relatively little knowledge or interest in the subject to be able to make a more informed decision just to be able to compare side by side the offers from alternate providers. **P2 LIHC**

It is far better to see all the information on one page and maybe then a longer contract to see more detailed information. **P1 LIHC**

I think the key facts page would be brilliant so you can just see the bullet points clearly and concisely in front of you. **P4 LIHC**

- Establish standard T&Cs for the same service

I think with a service that is going to be provided across the providers they should pretty much be uniform in terms of the terms and conditions. If you are providing the same service why are you going to have different terms and conditions depending on the supplier? **P3 LIHC**

A participant also suggested that contracts should be checked against the standards of the Code of Conduct, ideally with each contract looked over to be sure that there were no problematic clauses (as assumed by participant in the quote at the start of this section).

Transparency on financial benefits & costs

A second focus of discussion concerned transparency around financial benefits on longer term contracts, especially regarding the back-ending of financial benefits for the consumer and implications if they had to move home. It was suggested that the customer should receive some adjustment in financial benefit if there were large price changes.

Something like at the end of your contract term there is an adjustment provided to you so if there was a drop in the price there's maybe a plus or minus statement. Usually what happens is when a price comes in high they [provider] lock you in but if it drops down you are never going to get the benefit of that are you? We saw that with the fuel companies. The price of oil dropped tremendously but they kept the petrol station prices up high for weeks after that just taking in the money, so that transparency piece is key. **P3**

LIHC

Transparency on the make-up of costs and billing was also sought, for example whether the full benefits of energy reduction was being passed onto the consumer, standing charges and other fees.

A participant also queried their right to hold providers to financial benefit projections if they were not attained. For example, if the provider claimed the customer would save £XX and that deviated by 5% or 10% over a time period would the consumer have any recourse? This is particularly pertinent to longer, more complex bundled package contracts which might be difficult to curtail without considerable inconvenience.

Clarify insurance requirements

Other points raised by participants in relation to contracts and T&Cs were the need for clarity on insurance, both during installation of equipment and any consumer responsibilities around household insurance.

Clarify installation process and timeframe

Clear timeframes for installation of equipment was also mentioned, in the context of variable services across geographical areas.

So it is great signing up for something but actually if you cannot get it fitted or installed or up and running then there is not much point really. **P4 LIHC**

Clarify process and outcomes of contract changes

Participants also raised changes to contracts as a potential issue. For instance, some phone providers can change prices mid-contract which some consumers may not be aware of. One participant was unhappy about the effects of insolvency on contracts.

What happens if the company you signed the contract with either becomes insolvent or through the normal course of business is taken over by a current or new supplier and doesn't want to adhere to the terms that company one signed you up to? **P3 HIHC**

They gave an example of where they'd carefully chosen a supplier for environmental reasons which had become insolvent and had then been switched to the supplier of last resort, which they considered to have poorer credentials.

We are now with one of the companies that we didn't want to sign up with, not necessarily from a pure pricing point of view, maybe for ethical reasons. We didn't really want to be with that unethical company whose green washing was extreme. **P3 HIHC**

Ensuring continuity with contracts and T&Cs or removal of exit fees in the event of provider insolvency is an important consideration for HOMEflex.

Acknowledge the potential for lack of engagement

Two participants disclosed that they did not read T&Cs; another participant thought that in general people did not read them. Purchases like loans or mobile phone contracts were subjected to closer scrutiny however in part because they are easy to compare. Participants provided four reasons for not typically reading T&Cs: lack of time, too much information, T&Cs coming at a late stage in decision making with no consumer remit to alter them and documents being quality checked.

The potential for a lack of engagement with Terms and Conditions underscores the need for HOMEflex to advocate for the consumer in creating a Code of Conduct for flexibility service providers.

Suggestions to consider for Contracts and Terms and Conditions to support consumer protection in flexibility services

Consumer feedback on contracts and T&Cs resulted in these comments to inform consumer protection in flexibility services.

- Bring forwards customer access to the T&Cs earlier on in the decision-making process
- Provide a plain English, jargon-free standard template Key Facts document with headline bullet points and a second document with the finer details. Key points should aid consumer decision-making and include: upfront costs, benefits to consumer (earnings, savings), cooling down period, withdrawal from contract, who owns any equipment, consumer responsibilities, any risks, contact details for enquiries. An easy, simple Key Facts document would also help family members or carers to sort out services for relatives / others
- Have standard T&Cs for the same service
- Independently verify contracts and T&Cs to ensure that they meet the Code's standard
- Integrate a financial transparency requirement that providers pass on to consumers financial benefits resulting from changes to energy prices or service revenues
- Clarify how calculations of energy use and savings are made, with all fees and charges
- Establish what come-back consumers have on financial projections made by providers if these are not attained
- Ensure all insurance requirements are explicit
- Require providers to give time frames for installation of equipment / establishment of services
- Be clear on when a provider can change a contract and T&Cs and how a consumer can respond, particularly for company mergers and insolvency

Technical due diligence, data and cyber security

In the Round One focus groups, there was little concern expressed across the groups about data protection (see Table 24 in Appendix 3). In the second workshop, participants were presented with the content of the draft chapter. In general, the low income participant groups were more interested in this topic than the high income groups. The LILC group was keen to have consumer information in a variety of forms: a demonstration on installation, trouble-shooting resource, user manual, and a helpline so they could obtain assistance remotely. For participants in this group, it was important that they knew how the equipment worked. This group also wanted a job list for the installation process, so it was clear what was going to happen so participants knew what to expect.

For the low income groups, data sharing and hacking were also a common interest. Participants were generally comfortable with data sharing, so long as it wasn't personal data. They wanted it to be clear how their data would be used. One participant thought there could be a monthly voucher or cheaper rate if they shared more data with providers.

The potential life-changing effect of hacking was recognised by participants.

I guess the worst case with a particularly smart home would be to be hacked and to have all your settings changed. It could be life changing in a way that it could be if your bank account is attacked. **P2 LIHC**

Participants sought reassurance that providers would make use of cyber security certification and keep ahead of the game to prevent hacking. They also wanted to ensure that services would prevent outside bodies hacking into their home internet. Participants wanted providers to be able to monitor and detect if their flexibility service consumer account had been hacked into.

Provide information for low confidence groups

The low confidence participant groups had a shared interest in access to information about technologies. The high-income group wanted a user manual so they didn't have to rely on certified installers to undertake simple technology checks and tasks, given certified installers might be hard to find. They also wanted a good explanation of the technology at point of install.

I am not too fussed about safety, protection and cyber security as long as the standards are met. I would expect that anyway. When it comes to the technical side I do think it should be standard that the technology is explained so you understand what is going into your house and things like certified installers are used. How they would be certified and by whom I'm not too sure. **P4 HILC**

The comment by the participant above shows that HOMEflex could usefully provide clarity on which standards apply to different flex products and services, and any relevant certification bodies that should cover installers.

Standardise Warranties

This participant also expressed a desire for standardisation of warranty lengths across suppliers, to simplify comparison of offers in consumer decision-making.

Then also the bit that gets me is the guarantees and warranties and things like that. Are they going to be standardised? Do you get ten years from this bit of kit or five years for that? Is it going to be the same across the whole industry? Sometimes companies get you by giving you exactly the same fridge but this one has a two year warranty and this one has five years so you go with the one with the greater warranty. I think it is good maybe if that is standard and it is all really clear. **P4 HILC**

Support compatibility and interoperability

Another request for standardisation – of the technologies being installed – was voiced by participants in connection with lock-in. A participant recounted that if technologies were compatible across suppliers it would be easier to change suppliers, otherwise the consumer could be locked into a long contract. Another query around technologies was that providers ensured the interoperability of technologies being installed – potentially also with systems the consumer already has in their home.

Clarify responsibility for bundled offers

Participants in the high confidence groups recognised the difficulties with more complex bundled packages in obtaining customer services should repairs or issues arise. It was suggested that providers be required to clearly state who is responsible for which part of the overall bundle and package that is being supplied. Other participants were content with a single point of contact for bundled packages.

Share data to improve customer outcomes

High confidence group participants wanted service providers to use the data that consumers shared to maximise benefit to the customer, for example alerting them if they were no longer fully benefitting from the service.

I guess in terms of sharing the data, it would be important that there was feedback on the data. Perhaps because of lifestyle change – you're no longer working from home so your heating is turned off on week days – you're no longer benefitting from it [the service] because your energy use has dropped below the threshold required to make a gain from such a system, which might not have occurred to you. Obviously if they [provider] can see your data then they've got that opportunity to feed back to you, so they're not just sitting on a secret. **P3 HIHC**

Another participant was keen to use smart meter data as they had found it a useful source of information for their own use. They had no qualms about sharing energy data with providers.

I think data could be quite useful because it empowers people; it can help to change the way they behave. That is my observation but personally I have no issues about sharing my data so long as it is secure. **P2 LIHC**

One person wanted monitoring of how companies used customer data as well as a requirement for providers to analyse consumer data and feedback results via the bill.

I think that is important because essentially what happens with some of the big corporations is once you have signed up for something they will never down sell. They will always upsell. That is the thing that concerns us. There should be some analysis of how they are using that data. There is no point in having data if you are not actually analysing it for the benefit or sharing it with the consumer. I would like to see that broken down on the bill. **P3 LIHC**

Recommendations to consider for Technical due diligence, data and cyber security to support consumer protection in flexibility services

Consumer feedback on technical due diligence, data and cyber security generated these suggestions to support consumer protection in flexibility services.

- Provide a job list for consumers before installation to set expectations
- Provide different forms of information on technologies, including a clear demonstration at install, trouble-shooting resource, accessibly written user manual, and a helpline. As a general rule, providers should be encouraged to give a means of support that is not dependent on electricity (i.e. not phone or internet dependent) in case of outages
- Outline any certification requirements of installers
- Ensure that providers comply with data protection regulations and state how consumer information and data will be used, shared and stored
- Ensure providers comply with cyber security standards
- Be clear on hacking risks, including any possibility of home internet or smart system hacking
- Support interoperability across technologies and suppliers to avoid consumer lock-in
- Standardize warranty lengths across providers for similar products
- Require that providers analyse consumer data to:
 - Alert customers if they are no longer maximising benefits from the service
 - Encourage customers to make behavioural changes
 - Give regular feedback e.g. via bills so customers can maximise benefits from the service.

Complaints and redress

In the Round One focus groups, participants expressed few concern about complaints and redress (see Table 25 in Appendix 3). In Round Two, this topic generated significant discussion (Section 1, Table 5).

If you do have to go to make a complaint, the single point of contact or one business area deals with you, issues you with an acknowledgement of it, a potential reference and a timescale for how long it's going to take them from start to finish to deal with your complaint and ultimately an ombudsmen. Then you've got that confidence that if your energy supplier or whatever are not taking it seriously enough or not doing what you think they should, you have the option to take it to an independent entity. I think that would give me some confidence. **P2 LILC**

Recognise a preference for an independent ombudsman

Participants in all groups cited the need for an independent ombudsman to deal with complaints and redress whilst participants in two groups raised the need for a governing body or regulator to oversee, maintain standards and report on activities. One participant was not clear on the distinction between a regulator and ombudsman, an important point to clarify in the HOMEflex Code of Conduct. A participant said it was essential that the regulator actively enforced rules and standards.

It's terribly easy for them [regulator] not to have any teeth or to say they have and actually never to use them. The problem is the point at which it's happening, it's happening to you. You don't care that they've dealt with 999 other complaints within 24 hours, the fact that yours is still 36 hours old and unresolved is a big problem for you. **P3 HIHC**

Avoid bundled products and services falling into regulatory blind spots

This participant was also concerned that complaints about bundled services involving multiple regulators, where there was a danger of a dispute being passed around and dropped. They thought the presence of an independent arbitration service or ombudsman could remedy this.

I'd be bothered about them [regulators] playing a game of pass the parcel and a complaint slipping somewhere between one, two or three of these regulators and none of them actually wanting to pick it up. So what's really needed is some kind of uninvolved third party ...perhaps an independent arbitration service. I think potentially, that's one thing that would reassure people. **P3 HIHC**

Make complaints process simple and standardised

Participants were keen that flexibility service providers adopt best practice on complaints and redress from other sectors. It was also suggested that HOMEflex adopt a standard complaints process across providers and to be clear on what that meant for consumers.

Participants were informed by their own or known experiences of complaints, including with an energy supplier, faulty cavity wall insulation and an air company for a delayed flight. These experiences yielded useful insights on participant preferences for a complaints process for flexibility services which included:

- A straightforward complaint process for the consumer
- A simple form that outlines everything needed to make the complaint

I want to have a form that tells me this is the details we need and we need all these documents or contract or whatever communications and to have it all laid out so you are not piecemeal going back and forwards. I just want a really clear form that tells me everything I need to put down in one go. **P4 HILC**

- Have multiple methods to make a complaint (email, phone, website, chat) as expressed in the previous section for technical assistance. Low income households said they didn't have the time or phone allowance for long call wait times. It was suggested that providers could play useful recorded information to clients in phone queues rather than music
- Give a time frame for complaint resolution. This was important to minimise inconvenience / financial loss to the consumer
- Send a complaint acknowledgement with a reference number to the customer
- Provide a platform so consumers can track a complaint
- Put in place an emergency helpline or process for dealing with emergency complaints out of hours. Test the system in advance
- Stipulate that consumers can obtain recordings of provider customer service complaint calls
- Follow up after a complaint

I think things are getting a lot better generally because now when you make a complaint you immediately get an email asking you 'Have we solved your complaint' and 'How happy are you?' I think companies are very good at doing that because it really does go against them if you're not happy. **P2 HIHC**

Be aware of concerns around insolvency

Insolvency was a significant concern raised in three participant groups. As previously described in the Contracts and T&Cs section, insolvency could result in a change to T&Cs and / or the consumer ending up with a supplier they wouldn't have chosen. A participant shared an example of a friend who'd experienced faulty installation of cavity wall insulation which resulted in damp issues in the home. The contractor became insolvent, yet there was no redress even with trade bodies.

There were two trade bodies that you could complain to and neither of them could do a thing because they [contractor] were insolvent. My friend found the company had actually got a track record. They would work for a few years under a name and then become insolvent and then set themselves up again. They were notorious for it in the trade but they were still getting accreditation through the trade bodies. I think the insolvency thing is a huge worry for a lot of people. **P3 HILC**

This suggests an area for mistrust and consumer reluctance, particularly given that flexibility service providers may be new to the energy market and testing relatively new providers or services. The risk of insolvency or being passed on to a 'last resort' service provider may feature in consumers' decision-making. Consumers are wary of being left with products they cannot get support for.

I would just worry if I got something specially installed into the house that cost a lot of money I would be expecting it to last a long time; 10 or 20 years depending on the technology. I just don't know if I would have confidence say, if something went wrong in 10 years and who would I go to. How would I get help? **P4 HILC**

Provide cover in the event of service faults and failures

A final aspect mentioned by a participant relating to redress was that providers should have a back-up plan to cover any potential break in service to the customer. Faults and failure of service supply were regarded as a business problem, not a customer problem. The participant stated that if there was a long break in service which wasn't covered, they would lose faith in what they'd signed up for.

Recommendations to consider for Complaints and redress to support consumer protection in flexibility services

Consumer feedback on complaints and redress gave these recommendations to support consumer protection in flexibility services.

- Flexibility services require a regulator 'with teeth' that will proactively enforce rules and standards plus an independent ombudsman to instil consumer confidence in this new industry. The remit and responsibilities of each agency should be clearly spelled out for consumers
- Utilise best practice on complaints and redress from other sectors
- Clarify likelihood and impacts of suppliers going bust or becoming insolvent
- Implement a standard complaints process across providers that is clear and simple
- Ensure the complaints data gathering process is straightforward and achievable; consider a simple form that outlines everything needed for consumers to make a complaint
- Ensure that providers attend to all following points to promote inclusivity and effective resolution of complaints:
 - Multiple communication channels to make complaints (email, phone, website, chat)

- Emergency out-of-hours helpline
- Time frame for complaint resolution
- Complaint acknowledgement and reference number
- Platform for tracking a complaint's progress
- Consumer access on request to customer service phone recordings
- Complaint follow up
- Back-up plan to cover a break in customer service

Ethical considerations

Ethical considerations were a key factor in how participants assessed flexibility offers. Their discussions drew on their understanding of the broad range of factors that affect a households' energy use. This combined participants' own experiences of not receiving standard levels of service provisions due, for example to their remote location, as well as a broader acknowledgment that individual circumstances create different types of challenges.

In general participants felt very positive about a chapter on ethical considerations being included in the Code of Conduct.

Financial risk

The participants were presented with example statements from the draft code. The financial risk statement was:

'Any risk to consumers must be limited, passed to consumers only when they are able to manage them and any risk clearly communicated to consumers.'

One participant found this statement vague. Participants in the LILC group questioned what 'ability to manage financial risk' meant.

How do they quantify that? Who is to say who can manage? You know, what is the scale of? **P2 LILC**

Yeah, what's the threshold? Because some people are going to be more well off than others...in terms of managing everyone is going to be different, aren't they? So is it going to be like a set or is it going to be like based on what you earn or if you're on benefits? **P3 LILC**

A participant said that clear guidelines were needed, for example financial risk assessment as used in the banking sector:

For me it's clear guidelines maybe from the governing body as to how they risk assess a person as to what they can manage. **P2 LILC**

Drawing on and adopting practices from the financial sector, like providers conducting consumer credit checks, was also raised as a possible requirement for the HOMEflex Code of Conduct.

The need to limit financial risk for larger households / large families was also discussed; one participant favoured a price cap to achieve this (**P5 LIHC**).

Participants also commented on the following statements, which relate to design of services.

Design of services

- 'Providers must demonstrate that they have considered equity/fairness in their service design to account for different households' circumstances, capabilities, and preferences.
- 'Providers must assess risks and vulnerabilities (with reference to e.g. Citizens Advice' service design toolkit) to enable the adoption of flexibility services by those who otherwise may get left behind.'
- 'Providers must demonstrate that they have taken reasonable steps towards inclusive design. Where any identified consumer risks, vulnerabilities or exclusions have not been addressed, providers must give a clear reason and justification for this.'

Concerning the first statement, two groups identified distinct aspects of consumer vulnerability to consider regarding inclusive service design: physical capabilities (e.g. eyesight), mental capabilities (e.g. to understand and use a product or service) and financial capability skills. Participants wanted HOMEflex to be more explicit on customer vulnerabilities and the capabilities required to access a service.

Be more explicit, write down a lot of examples, but then also have a bit that's more broad as well for people that could also fall into a wider category.
...because you might read that and think, I'm a vulnerable person so that covers me, but maybe you're not one of the people that that covers, there's maybe a loophole. **P4 LILC**

This suggests that HOMEflex requires a checklist of consumers that are considered vulnerable. The Citizens Advice report on managing risks with demand-side response describes a consumer in vulnerable circumstances in relation to the Priority Services Register (PSR)⁸ or industry approaches to vulnerability⁹. The vulnerabilities that were identified by participants are included in PSR and industry definitions of vulnerability.

One participant noted the lack of reference in ethical considerations to prepayment meter customers. This advocates for prepayment meter customers to be specifically named as vulnerable in the Code of Conduct to ensure that their needs are taken into consideration by providers when designing flexibility services.

So it would be lovely to see something there, just something put in for those people who are the most vulnerable and the poorest people, just to protect them when they do get into financial difficulty and can't top up their meters and they have run out of emergency credit. Is there something that could be done a little bit more for them? Because I know that there can be some gaps

⁸ Citizens Advice. 2021 'Demanding attention. Managing risks with demand-side response, to improve consumer experience tomorrow'. pg 16.

⁹ For an industry approach to vulnerability, Ofgem defines vulnerability as 'when a consumer's personal circumstances and characteristics combine with aspects of the market to create situations where he or she is: (1) significantly less able than a typical domestic consumer to protect or represent his or her interests; and/or (2) significantly more likely than a typical domestic consumer to suffer detriment or that detriment is likely to be more substantial. Ofgem Consumer Vulnerability Strategy 2019.

in places where people just have no electricity at all, so it would be nice to see something mentioned there. **P2 HIHC**

Indicate how products match different types of consumers

The groups discussed how providers could design a range of products and services for customers with different abilities to engage. However, participants countered against adopting an overly prescriptive approach that meant providers decided which types of customers would be able to easily take up a specific offer. One participant responded directly to this approach in the following exchange with a focus group facilitator:

Well the way you're looking, that's one end of the telescope but the other end of the telescope is actually making sure that people do get the opportunity to discuss the possibility of it rather than saying "oh that's definitely not for me". **P3 HIHC**

This indicates the value in providers adopting more inclusive design principles. It suggests providers should open up products and services not just to those that they assume will find it easy to engage, but also to support people in assessing whether an offer is right for them, or who may want to learn or adapt in order to participate.

However, the statement on the need for providers to 'demonstrate that they have taken reasonable steps towards inclusive design' was questioned by two groups. It was thought to be too vague. There was no indication of who decides what is a clear reason or if it is justified to not provide an inclusive service, and by inference what constitutes 'reasonable steps towards' inclusive design.

I believe that I am one [vulnerable customer]. I would say where there are identified consumer risks, vulnerabilities and exclusions I would be more confident where, above that justification and clear reason, we could find a way to solve my problem or my risks or things like that. It is not enough, justification. It [a flexibility service] needs to be something that fits me, my needs, my dependants, my everything. **P5 HILC**

This indicates a need for the Code of Conduct to clarify what constitutes inclusive design. It suggests that it should:

- clearly defined standards on inclusive design, including elements of service design required to be considered inclusive and service design not considered inclusive
- identify what consumer risks and vulnerabilities need to be addressed
- define what constitutes 'reasonable steps taken' in service design and what reasons and any justifications of non-inclusive design that would be valid

Verify standards for inclusive design are being used

The design statements shared were considered 'top notch and far beyond anything I have seen' by a HILC group participant. However, participants also queried how inclusive design of services would be implemented and monitored. They asked whether an independent body would verify that providers have adhered to standards for inclusive design. HOMEflex should indicate how inclusive design will be monitored and publicised. Participants clearly stated a preference for an independent body or compliance scheme that has enforcement powers and uses them for flexibility schemes.

Other participants were reassured that the Code of Conduct encompassed thinking about equity and fairness. One participant expressed how they wanted flexibility providers to treat potential customers, ensuring that the right system was available to the right people.

If my home is wholly unsuitable I would expect them [flexibility provider] to tell me and not just install something and say it is going to work and take the money and leave me with no benefit. I suppose the point is just making sure it is the right system for the right people. **P4 HILC**

Reduce risk of lock in

One further issue of concern raised by participants was of lock in, being tied to a provider. The flexibility example used was the EDF ten-year battery with grid flexibility service.

I think one of the good things about the energy market over recent years has been the ability to swap and change to move to get the best price. Going forwards, as a regulator and as an independent body, consumers should not be prevented from switching suppliers or anything put in place that prevents fair market economic behaviour to happen. **P2 LIHC**

Therefore, HOMEflex should present how providers can ensure that customers can switch or exit a contract, paying particular attention to the needs of vulnerable consumers.

Suggestions for the Code of Conduct

Consumer feedback on ethical considerations raised the following suggestions to inform the HOMEflex Code of Conduct:

- Clarify the financial risk statement, for example on how financial risk could be limited, when it can be passed to consumers and give guidance on when a consumer is considered able to manage financial risks
- Clearly defined standards on inclusive design, including elements essential to inclusive service design and those not considered inclusive

In addition, the discussions highlighted other points to consider to improve consumer protections and build confidence:

- Review best practices from the financial sector, like providers conducting financial risk assessments and credit checks. Ideally an independent body would stipulate risk assessment guidelines
- Create a checklist of consumers that are considered vulnerable, to include prepayment meter users, which providers can consider when designing services
- Generate a list of customer capabilities with appropriate indicators for different flexibility services which providers reference when designing (and marketing) services. This would help to ensure that no one is offered a flexibility service that is inappropriate for them. It also enables the identification of consumer support needs for service take up
- Identify consumer risks that need to be addressed
- Define what constitutes 'reasonable steps taken' in service design and what reasons or justifications for non-inclusive design that would be valid
- Indicate how services with longer contracts should be designed and communicated to avoid unwanted lock-in, paying particular attention to the needs of vulnerable consumers
- Establish an independent regulatory authority to actively support implementation and monitor inclusive services

Section 3: Conclusions

The discussions held in the focus groups demonstrate the potential value in having a Code of Conduct for flexibility providers. In this section we draw general conclusions about what consumers expect from a Code of Conduct scheme covering flexibility products and services, and how HOMEflex can take forward some of the insights.

Participants recognise all five areas covered in the Code of Conduct as relevant. Overall, consumers would value being able to compare offers across providers and estimate the likely costs and benefits of an offer for their specific circumstances. They want to see standardised terms and conditions which have been scrutinised by an independent party. They are less concerned about data security, expecting providers to follow existing regulations. Instead, they want providers to be proactive in how they use consumer data, suggesting that service providers use it to make tailored recommendations and cost predictions to support consumer decision-making about taking up an offer, or to provide ongoing support and recommendations once a consumer has opted in. They see an opportunity for HOMEflex to champion inclusive service design and advocate for all consumers. However they question how this can be achieved in practice. They recognise a need for clear definitions on inclusive design, what it means for different consumers and how it can be independently verified.

One of the main priorities for participants was the ability for the Code of Conduct to be used to hold providers to account in the event of any problems. This suggests a preference for service providers to go beyond voluntarily signing up to a Code of Conduct, and to submit to independent scrutiny and accreditation. HOMEflex will need to consider the impact on consumer confidence of an accreditation scheme relative to voluntary compliance to the Code of Conduct. Consumers will also need clarity on what is covered by HOMEflex's Code of Conduct and why complying with these standards should be beneficial for consumers.

There needs to be a piece of work to inform consumers that there is a form of accreditation available because people won't know unless they are told. I think quite often there is a proliferation of standards and it is difficult as a lay person to be able to say 'Well what does that actually mean and therefore why is it important?' It might affect the decision to choose someone that is accredited over someone that is not. P2 LIHC

Reflections from the HOMEflex Team

This research provides valuable insight into consumer perspectives on emerging flexibility services and perceptions of risks and opportunities. It highlights key priorities for consumers, which must be addressed to build confidence and facilitate fairness for consumers in the

emerging market for energy flexibility for domestic consumers and micro – businesses. The research findings strongly support the objectives of the HOMEflex project and will provide a useful starting point for the drafting of standards and development of proposals for possible accreditation mechanisms and compliance monitoring.

Findings highlight the particular importance of clear and fair terms and conditions (T&Cs), and the need for standards and third-party monitoring hereof to ensure industry adherence to good and fair practice around T&Cs. Moreover, discussions around the dependence on personal and household circumstances and practices raise important questions for consideration in the HOMEflex standards, on how to encourage flexibility services design and provision to consider individual household circumstances and facilitate participation and inclusion. The research also highlights the importance of effective and streamlined complaints processes and access to redress, which will be a central theme for consideration in the HOMEflex project.

Overall, it is encouraging to observe a high level of interest in energy flexibility services amongst participants in this research, and the increasing likelihood of participation observed in response to the presentation of the principles of the HOMEflex standards.

The findings presented in this report will inform the drafting of the HOMEflex Code of Conduct, ensuring the Code addresses areas of key concern for consumers. We hope that in welcoming and encouraging ethical practice, the HOMEflex project will facilitate the growth of the domestic flexibility market to the benefit of consumers, while supporting grid-balancing and supporting the transition to net zero electricity systems.

Reflections from SSEN Future Networks Innovation

This report, and the views of our customers on the future of flexibility, will help to shape the HOMEflex project. HOMEflex is an NIA funded project which came about following engagement with British electricity distribution network operators (DNOs) as members of the [Open Networks programme](#).

As such the information in this report and the outcomes of the HOMEflex project will be used by the DNOs to facilitate fairness in energy flexibility planning. The report and outcomes of HOMEflex will also be made publicly available on the SSEN [website](#), and the Energy Network Association website, specifically on [this page](#).

Appendix 1: Methodology

Literature review

A literature review was conducted at the outset of the research to establish a set of common consumer concerns around energy flexibility services. The review was conducted using Zotero research software and encompassed both existing review work¹⁰ and primary research. The review produced seven core themes of potential customer concerns:

- Contracts: concerns around understanding or fulfilling contract obligations
- Privacy: concerns around data use and data sharing
- Customer care: concerns around installation risks, repair, redress or vulnerable care
- Financial: concerns around costs or lack of savings
- Disruption: concerns around extra time or effort involved in taking up/using offers
- Personal/social: concerns around household dynamics or mental health
- Operational: concerns around misuse, damage or failure

Sampling framework and recruitment

The literature review, as well as the Smart & Fair Capability Lens, was used to develop the sampling framework. Specifically, this considered factors that might make an energy consumer more vulnerable to a particular type of concern around energy flexibility services. These factors included: a household's income, levels of energy literacy and digital confidence, tenure, household structure and routines, and equipment installed. The team felt the most salient differences structuring households' ability to engage with the emerging flex services market were likely to income level, digital confidence and energy literacy. Consequently, the sampling frame was structured to create four groups: high income with high confidence levels, low income with high confidence levels, high income with low confidence levels, low income with low confidence levels.

The screening questions for digital and energy confidence are detailed in Table 5 below. Respondents with all green responses were categorised as higher confidence. Respondents with any red answers were categorised as lower confidence.

Table 5: Screening questions used to determine energy and digital confidence

Category	Question	Response options		
Energy	Have you ever switched your gas or electricity supplier?	Yes, switched	Considered switching, but haven't	No haven't switched

¹⁰ Including: Demanding attention. Managing risks with demand-side response, to improve consumer experience tomorrow. Citizens Advice. 2021

	How confident are you about understanding information sent to you by your gas or electricity supplier (e.g. in bills, emails)?	Very confident	Fairly confident	Not very confident	Not confident at all	
Digital	How confident are you about using online banking websites or apps?	Very confident	Fairly confident	Not very confident	Not confident at all	
	To what extent do you agree with the statement: 'I am happy to share my data with organisations I have a relationship with'	Agree strongly	Agree	Neither agree nor disagree	Disagree	Disagree strongly
	To what extent do you agree with the statement: 'Somebody has to show me how to use new technology'	Agree strongly	Agree	Neither agree nor disagree	Disagree	Disagree strongly

In addition, we aimed to cover a range of other relevant factors through our recruitment through specifying that each group needed to include households with a mix of tenures, ages, genders, rural-urban locations, and heating types. We also targeted the SSEN license areas as SSEN is the research lead. The full sampling framework is listed in Table 6 below.

Table 6: Workshop sampling framework

Category	Group A	Group B	Group C	Group D
Income	Household Income <£30k	Household income <£30k	Household income >30k	Household income >30K
Energy confidence	Low	High	Low	High
Digital confidence	Low	High	Low	High
Elderly and/or long-term health condition	At least 1 in each group			
Medically dependent on electricity	At least 1 in each group			
Family or caring responsibility	At least 1 in each group			
Urban	At least 1 not in major city in each group			
Off-gas grid	At least 2 off gas grid in each group			

SSEN areas	All from SSEN license areas
SSEN Scotland	30% from SSEN's Scottish license area across all groups
SSEN CMZ	Prioritise CMZ zones across all groups
Renters	1 or 2 renters in each group
Gender	50% female across all groups

A research agency was used to recruit the participants according to the sampling framework supplied. Each participant was offered an incentive to attend the focus groups.

Summary of participants

Table 7 summarises key characteristics of participants in each focus group.

Table 7: Key characteristics of recruited workshop participants

Group	LILC (Low income, low confidence)	LIHC (Low income, high confidence)	HILC (High income, low confidence)	HIHI (High income, high confidence)	Total
Total	4	5	5	5	19
Medically dependent on electricity	0*	1	1	1	3
Family or caring responsibility	1	1	4	1	7
Urban	1	2	1	1	5
Off-gas grid	2	3	2	2	9
SSEN areas	0	4	3	2	9
SSEN Scotland	1	2	3	2	8
Renters	2	3	2	2	9
Female	3	3	4	3	13

Focus groups

The four participant groups engaged in two focus groups each, with sessions delivered two to three weeks apart. All focus groups were facilitated by two to three researchers and lasted 90 minutes. Discussion was recorded and transcribed.

Round One focus groups

The first focus groups in October gave participants information on flexibility services and shared three examples of current services. They were designed to elicit consumer concerns about flexibility services. Table 8 summarises the structure of the Round One focus groups.

Table 8: Round One focus group topic guide

Time	Activity
15 minutes (00:15)	Welcome and introductions
10 minutes (00:25)	Wider context: energy flexibility and polls
15 minutes (00:40)	Example 1: Demand Flexibility Service
15 minutes (00:55)	Example 2: Battery with grid services package
5 minutes (01:00)	Break
15 minutes (01:15)	Example 3: Digital optimisation platform
5 minutes (01:20)	Confidence poll
5 minutes (01:25)	Brief protection discussion
5 minutes (01:30)	Next steps and close

Below are the presentations of the three examples used to explain flex services to consumers.

Figure 5: slide explaining DFS for Round One focus groups

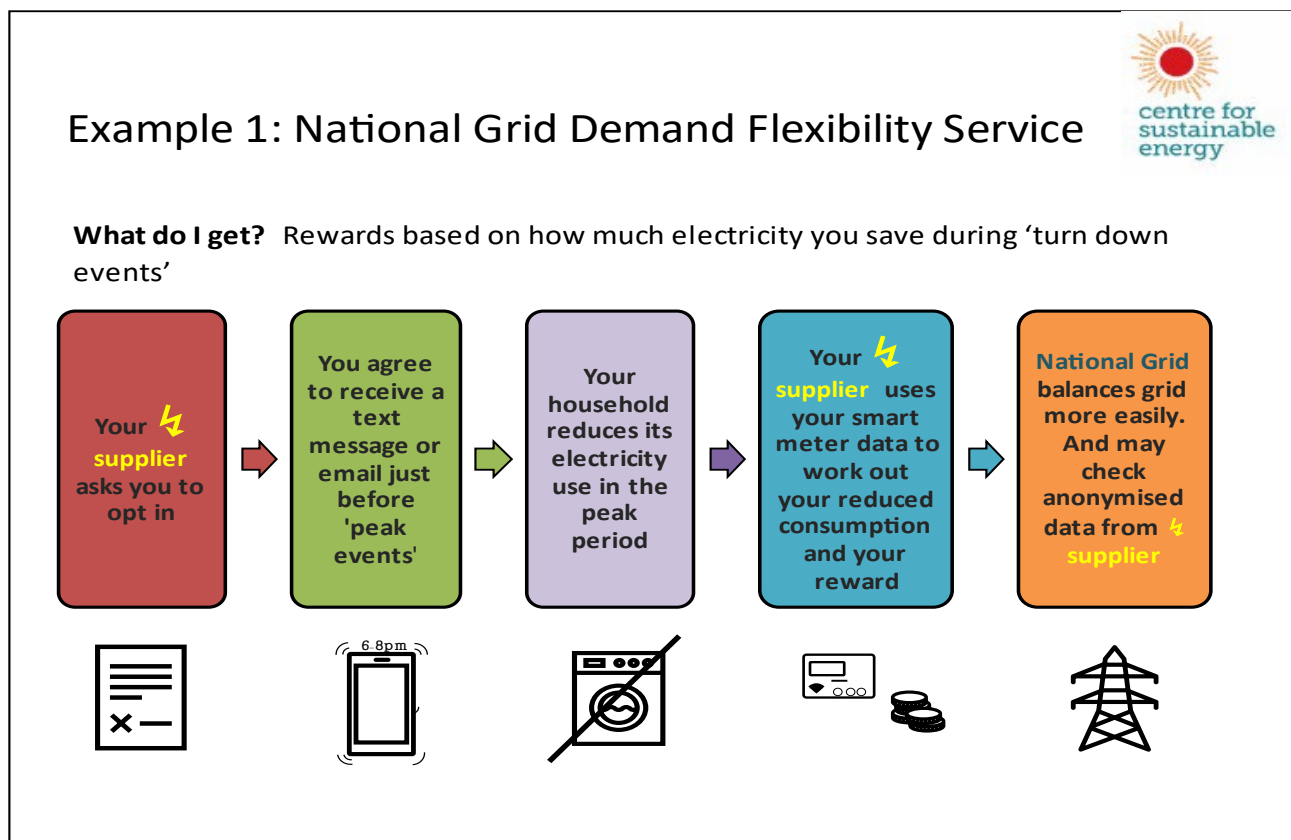


Figure 6: Slide explaining battery with grid services offer for Round One focus groups

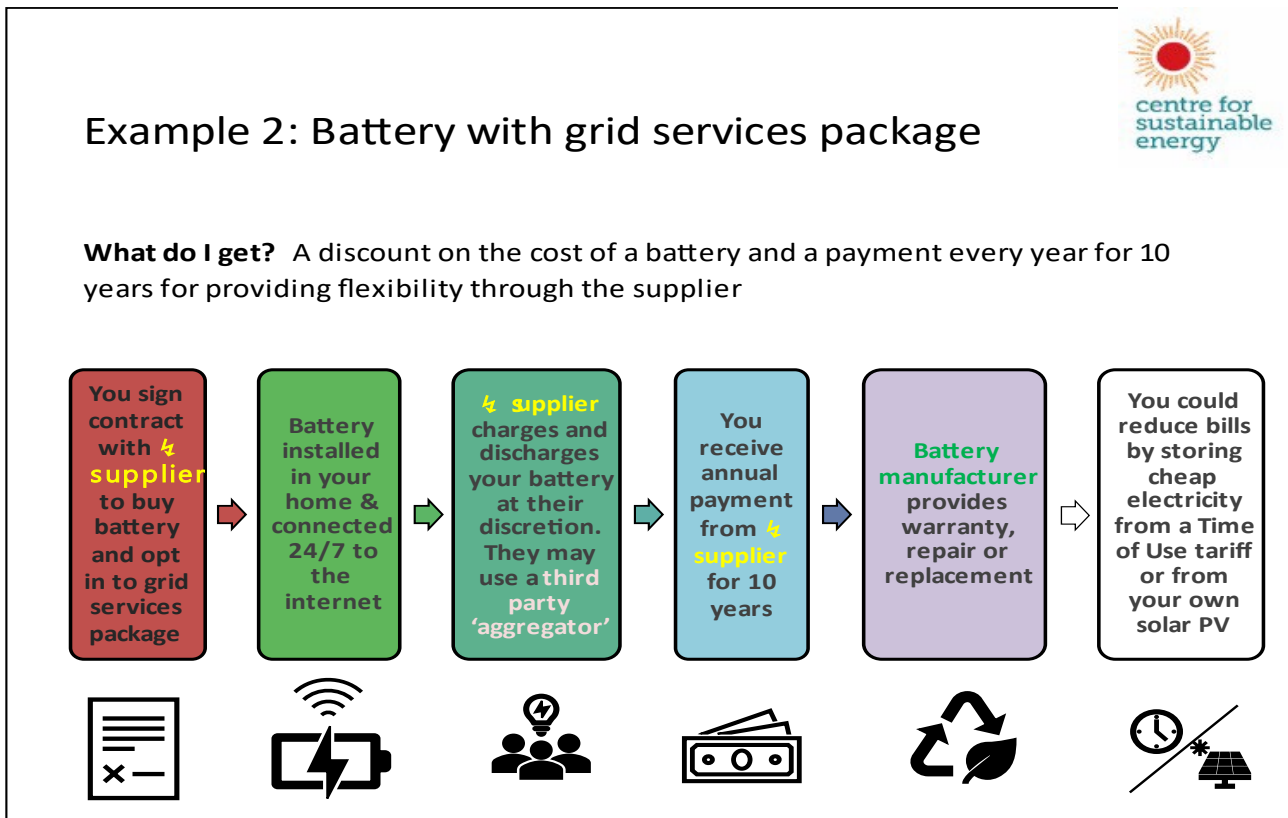
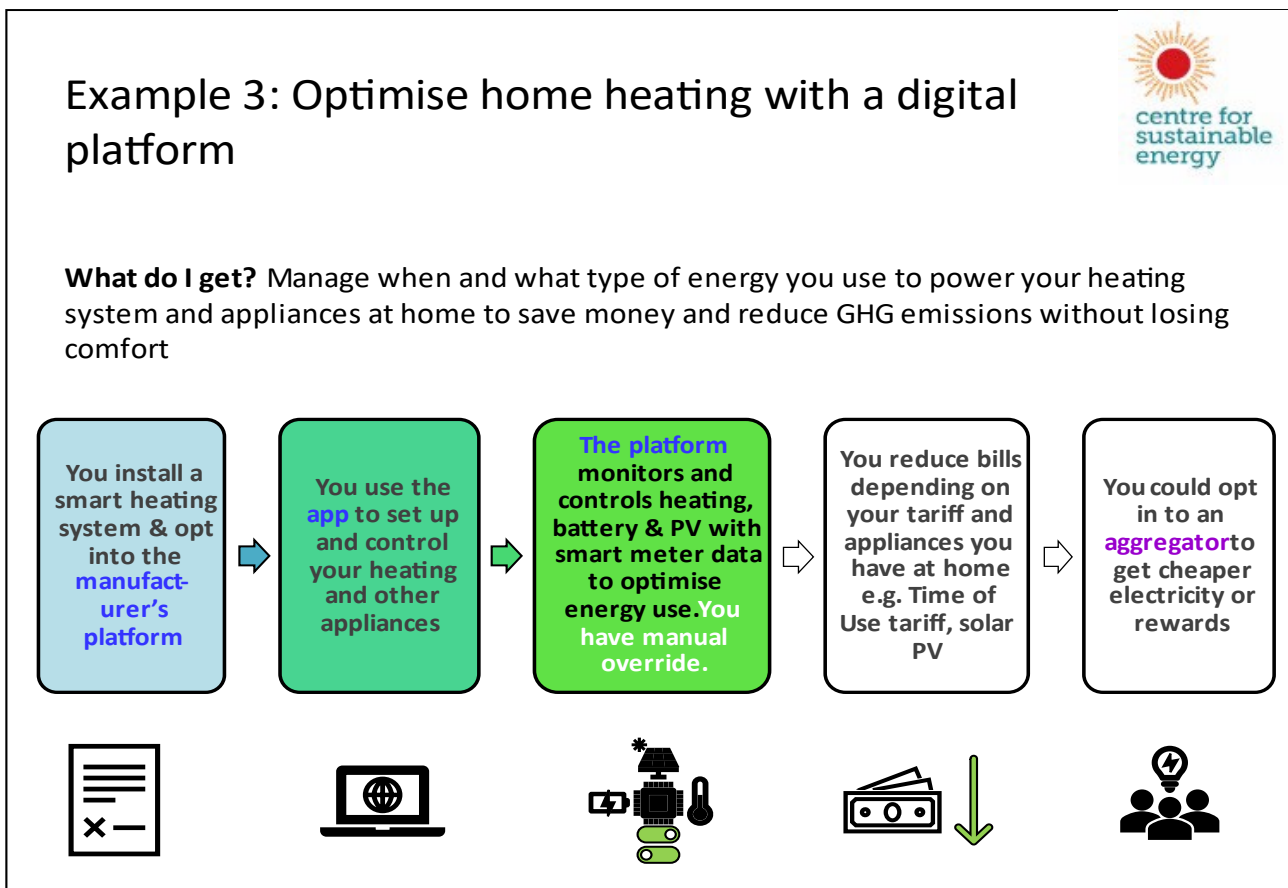


Figure 7: Slide explaining home energy platform for Round One focus groups



Round Two focus groups

The Round Two focus groups in November were tailored for each participant group according to the concerns they had raised in the previous one. They were designed to elicit feedback on each of the four topic areas in the HOMEflex draft code of conduct. Table 9 summarises the structure of the Round two focus groups.

Table 9: Round Two focus group topic guide

Time	Activity
5 minutes (00:05)	Welcome and hello again!
5 minutes (00:10)	Recap of last session
5 minutes (00:15)	Introduction discussion around consumer codes and standards
10 minutes (00:25)	Introduction to HOMEflex and polls
10 minutes (00:35)	Sales and Marketing discussion
10 minutes (00:45)	Ethical Considerations discussion
10 minutes (00:55)	Contracts and Terms and Conditions discussion
5 minutes (01:00)	Break
10 minutes (01:10)	Technology Due Diligence, Data and Cyber Security discussion
5 minutes (01:15)	Complaints and Redress discussion
10 minutes (01:25)	Confidence poll and discussion
5 minutes (01:30)	Next steps and close

Data analysis

Transcripts were analysed in NVivo QSR International software. For the Round One transcripts, thematic analysis was carried out by one researcher using deductive and inductive approaches. Deductive coding utilised the main headings of the draft code of conduct e.g. Sales and marketing. Inductive coding of emergent themes from transcripts recorded additional concerns or comments raised by participants outside to be draft code of conduct. The concerns raised by each participant group in relation to main headings in the code of conduct informed the second workshop round.

Thematic analysis of Round Two transcripts used a deductive approach, compiling participant views on trust marks and feedback on each main heading in the code of conduct. Any differences between groups were reported on.

Appendix 2: Poll results

Round One focus groups

Table 10: Poll – How do you normally switch your heating on/off?

Response	LILC	LIHC	HILC	HIHC	Total count	%
Manually	4	1	3	2	10	53%
Automatically	0	4	1	3	8	42%
Other	0	0	1	0	1	5%

Table 11: Poll – Do you have any of the following devices in your home?

Response	LILC	LIHC	HILC	HIHC	Total count	%
Smart meter	1	5	2	3	11	58%
Smart plug	0	2	0	0	2	11%
Smart thermostat	2	1	2	1	6	32%
Smart lighting	0	0	2	0	2	11%
Economy 7 meter	1	0	1	1	3	16%
Timer plug	0	0	3	0	3	16%
Teasmade	0	0	0	0	0	0%

Table 12: Poll – Would your household be able to shift the time you do any of these activities outside of peak time (4-8pm)?

Response	LILC	LIHC	HILC	HIHC	Total count	%
Cooking	0	2	3	2	7	37%
Entertainment: e.g. watching TV, playing video games	1	1	0	1	3	16%
Laundry: e.g. using washing machine/tumble-dryer	4	5	5	4	18	95%
Lighting	2	0	0	1	3	16%
Space heating: e.g. having the heat on	2	0	1	0	3	16%
Personal washing: e.g. using the shower	3	3	3	1	10	53%
Kitchen washing: e.g. dishwasher/washing-up	3	3	3	4	13	68%

Table 13: Poll – Overall, what are your main concerns about taking up the flexibility offers we’ve discussed today?

Response	LILC	LIHC	HILC	HIHC	Total count	%
Contracts: e.g. too confusing	3	2	4	4	13	76%
Privacy: e.g. data sharing	2	1	0	0	3	18%
Customer care: e.g. in case something goes wrong	4	5	2	2	13	76%
Financial: e.g. not saving enough money	3	4	4	3	14	82%
Disruption: e.g. taking up time	2	0	1	4	7	41%
Social: e.g. difficult to get cooperation from household	0	0	0	0	0	0%
Operational: e.g. not meeting energy needs	4	2	2	3	11	65%

Table 14: Poll - Right now, how confident would you be of taking up one or more of the flexibility offers we’ve discussed? (Assume you would be able to afford any upfront cost)

Response	LILC	LIHC	HILC	HIHC	Total	%
Very confident	2	0	2	1	5	28%
Fairly confident	1	4	1	1	7	39%
Not confident	1	0	1	1	3	17%
Not confident at all	0	0	0	1	1	6%
Don’t know	0	1	0	1	2	11%

Round Two focus groups

Table 15: Poll – Would accreditation increase your confidence?

Response	LILC	LIHC	HILC	HIHC	Total	%
Yes	4	4	5	5	18	95%
No	0	1	0	0	1	5%

Table 16: Poll – Please rate the Code of Conduct headings by priority (total)

Response	Highest priority	High priority	Medium priority	Lower priority	Lowest priority
Sales and marketing	1	1	7	5	5
Ethical considerations	5	7	4	1	2
Contracts and T&Cs	8	6	4	1	0
Tech responsibilities, data	5	5	4	3	2
Complaints	6	7	5	0	1

Table 17: Poll - Please rate the Code of Conduct headings by priority (LILC)

Response	Highest priority	High priority	Medium priority	Lower priority	Lowest priority
Sales and marketing	0	0	1	1	2
Ethical considerations	1	1	1	1	0
Contracts and T&Cs	1	1	2	0	0
Tech responsibilities, data	1	1	0	1	1
Complaints	1	2	1	0	0

Table 18: Poll - Please rate the Code of Conduct headings by priority (LIHC)

Response	Highest priority	High priority	Medium priority	Lower priority	Lowest priority
Sales and marketing	0	0	1	3	1
Ethical considerations	1	1	1	0	2
Contracts and T&Cs	2	3	0	0	0
Tech responsibilities, data	1	0	2	2	0
Complaints	2	1	1	0	1

Table 19: Poll - Please rate the Code of Conduct headings by priority (HILC)

Response	Highest priority	High priority	Medium priority	Lower priority	Lowest priority
Sales and marketing	0	1	2	0	2
Ethical considerations	1	3	1	0	0
Contracts and T&Cs	3	1	0	1	0
Tech responsibilities, data	3	2	0	0	0
Complaints	2	2	1	0	0

Table 20: Poll - Please rate the Code of Conduct headings by priority (HIHC)

Response	Highest priority	High priority	Medium priority	Lower priority	Lowest priority
Sales and marketing	1	0	3	1	0
Ethical considerations	2	2	1	0	0
Contracts and T&Cs	2	1	2	0	0
Tech responsibilities, data	0	2	2	0	1
Complaints	1	2	2	0	0

Table 21: Poll - Right now, how confident would you be of taking up one or more of the flexibility offers we've discussed? (Assume you would be able to afford any upfront cost)

Response	LILC	LIHC	HILC	HIHC	Total	%
Very confident	3	0	1	0	4	21%
Fairly confident	1	4	4	4	13	68%
Not confident	0	0	0	1	1	5%
Not confident at all	0	0	0	0	1	5%
Don't know	0	0	0	0	0	0%

Appendix 3: Concerns raised by participants in the first focus group, by Code chapters

Table 22: Round One focus group concerns on Sales & Marketing

Sales and marketing	LILC	LIHC	HILC	HIHC
Specify financial rewards relative to the timeframe, upfront costs, running costs and additional work involved	✓	✓	✓	✓
Provide a clear explanation of the service including use of equipment & maintenance	✓		✓	
Include the environmental benefits of the service or environmental impacts of the technology		✓		✓
Provide transparent calculations for energy reductions		✓		
Specify geographic differences in service provision & avoid mis-selling to inappropriate locations		✓		
Explain how prices are set				✓
Explain how rewards are calculated	✓		✓	✓
Indicate the trustworthiness of supplier				✓
Specify any eligibility requirements			✓	

Table 23: Round One focus group concerns on Contracts and T&Cs

Contracts and T&Cs	LILC	LIHC	HILC	HIHC
Mitigate for technology becoming outdated		✓	✓	✓
Clarify ownership of tech if consumer moves home		✓	✓	✓
Specify contract length and withdrawal process	✓	✓		
Specify installation process (timescales, upheaval)			✓	✓
Specify consumer options for control of device. overriding flex service control	✓		✓	✓
Explain how consumers can monitor reduced usage	✓			✓
Provide explanations of penalty / loss of incentive if don't achieve target	✓			

Table 24: Round One focus group concerns on Technical due diligence, data and cyber security

Technical due diligence, data and cyber security	LILC	LIHC	HILC	HIHC
After warranty ends who is responsible for repairs and maintenance?	✓		✓	
Upgrading tech after the contract ends	✓		✓	
Difference of opinion on energy use / generation with service supplier		✓		
Need for consumers to be able to see their usage		✓		
Insurance for breakage, damage or theft. Should a battery be added to household insurance?			✓	
Hacking and data privacy			✓	
Customer service / warranty in rural locations		✓	✓	
Fixing tech issues – look online, family and friends			✓	
Power cuts – length and operation of devices		✓	✓	
Smart meter reliability – dumb mode / intermittent readings		✓		

Table 25: Round One focus group concerns on Complaints and redress

Complaints and redress	LILC	LIHC	HILC	HIHC
Dispute with supplier – what happens?			✓	
Government or independent body for consumer protection e.g. regulation on insolvency, transparency of billing, customer service (current issue re. lack of transparency of energy suppliers / energy system)			✓	
Insolvency			✓	
Need quick resolution if technology is not working. Energy supplier customer services are not currently adequate.	✓			
Regulator and mandatory regulation, with common standards across energy suppliers, but still want to retain competition between service suppliers (fairer pricing)	✓			
Consumer care				✓

Table 26: Round One focus group concerns on Ethical Considerations

Ethical considerations	LILC	LIHC	HILC	HIHC
Design services to meet the needs of different consumers with different housing conditions e.g. prepayment meter users, tenants, those in rural locations, sole occupiers, families.	✓	✓	✓	✓
Provide an easy means for consumers to assess their ability to shift demand	✓	✓	✓	✓
Provide appropriate support and information for people to learn how to use new technology, overcome concerns or lack of confidence, involve all household members	✓			✓
Give 'day before' notice on services to allow for planning	✓			✓
Consider low energy consumption households; how to include them or flag if they won't be able to benefit	✓		✓	
Consider different ability to get smart meters and internet connection	✓			
Address housing-related issues like space requirements, insulation, noise and safety of technologies	✓		✓	✓
Present a package of solutions for people to be more energy efficient and use less energy		✓		
Indicate potential financial advantage of associated changes (e.g. a Time of Use tariff works with battery storage)		✓		
Indicate what happens if a consumer can't behave in the expected way due to unforeseen circumstances		✓		
Reduce upfront costs with grants, or provide tech for free in return for flex			✓	
Integrate with existing technologies – simple display screen to monitor / control appliances, useful for folk that don't use apps			✓	
Schemes should be less complicated and not involve work and hassle				✓
Monitor risky consumer behaviour				✓
Prevent scamming				✓